

Do America’s Most Highly-Cited Scientists Participate in NIH Peer Review?

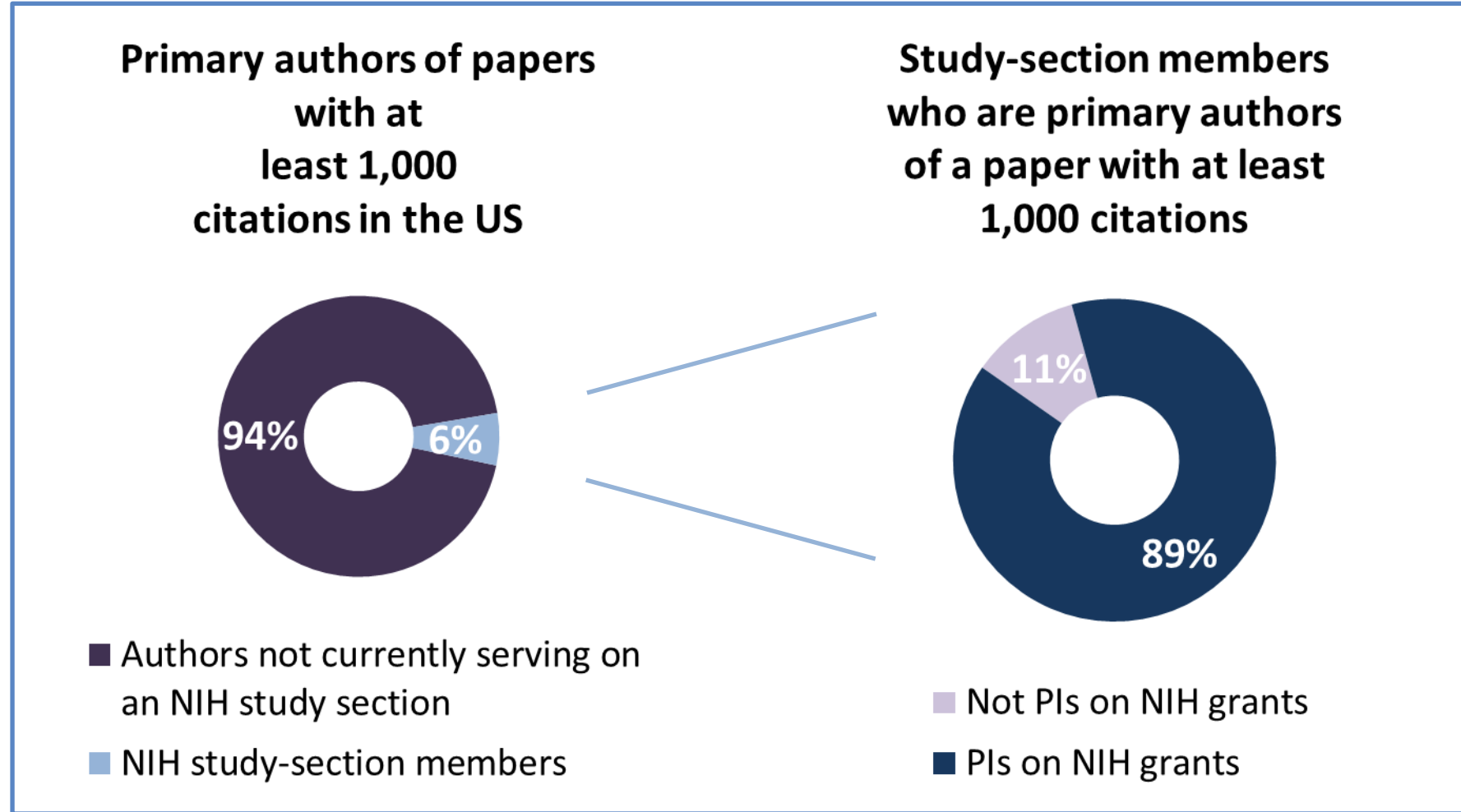
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Disclosures: None

Background

- Concerns have been raised that many of the nation’s most highly-cited scientists do not serve on NIH peer review study sections.
- Nicholson and Ioannidis observed that only 6% of primary authors of papers with at least 1,000 citations were currently serving on study sections. Of those, 89% were currently principal investigators (PIs) on NIH grants (*Nature* 2012; 492:34-6).



- The analysis was limited by identifying highly-cited scientists by raw citation counts.

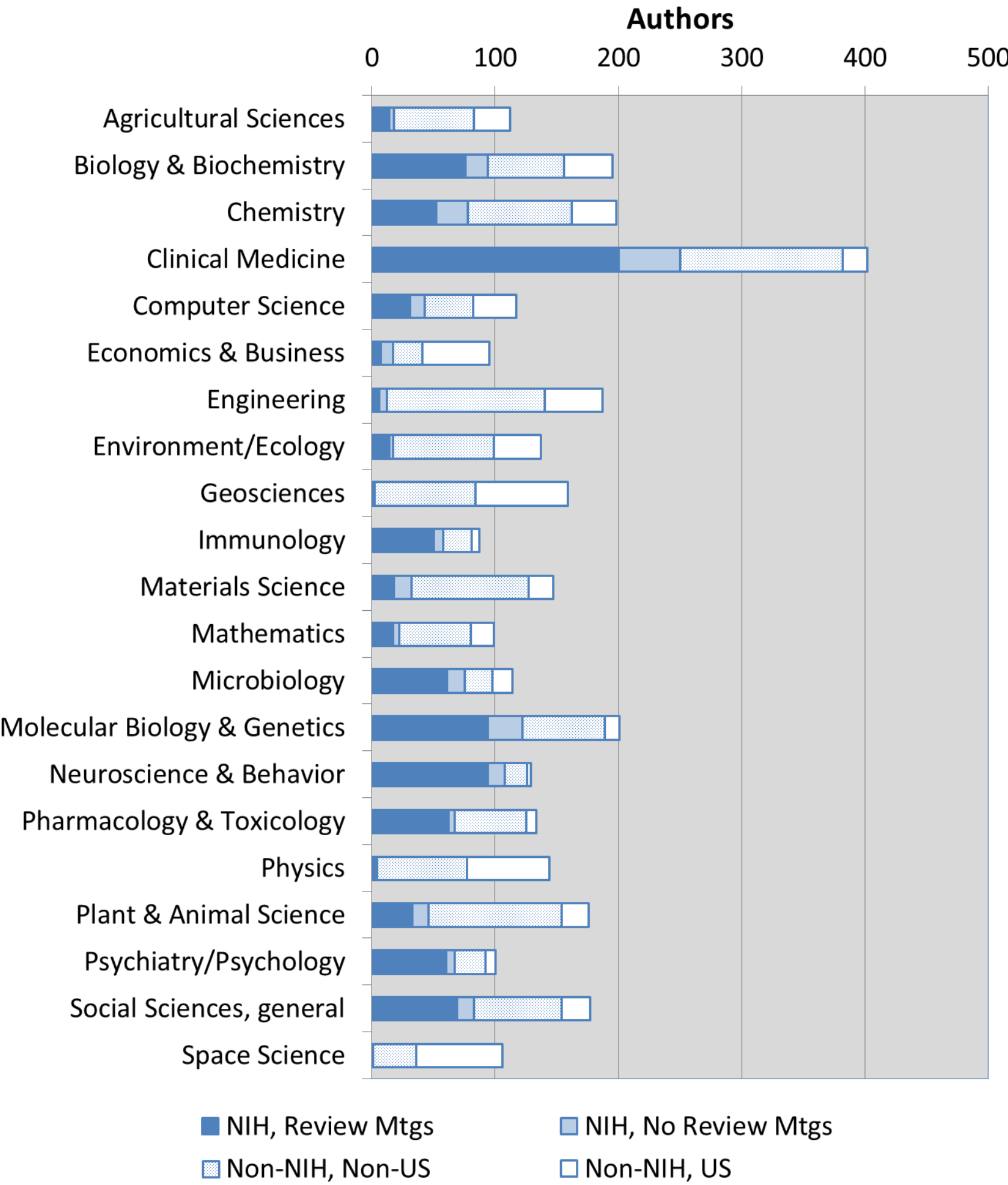
Objectives

- To determine the rate at which the authors of “hot papers,” *i.e.*, papers cited more often than 99.9% of others in the same field and published in the same year, serve on NIH study sections.

Methods

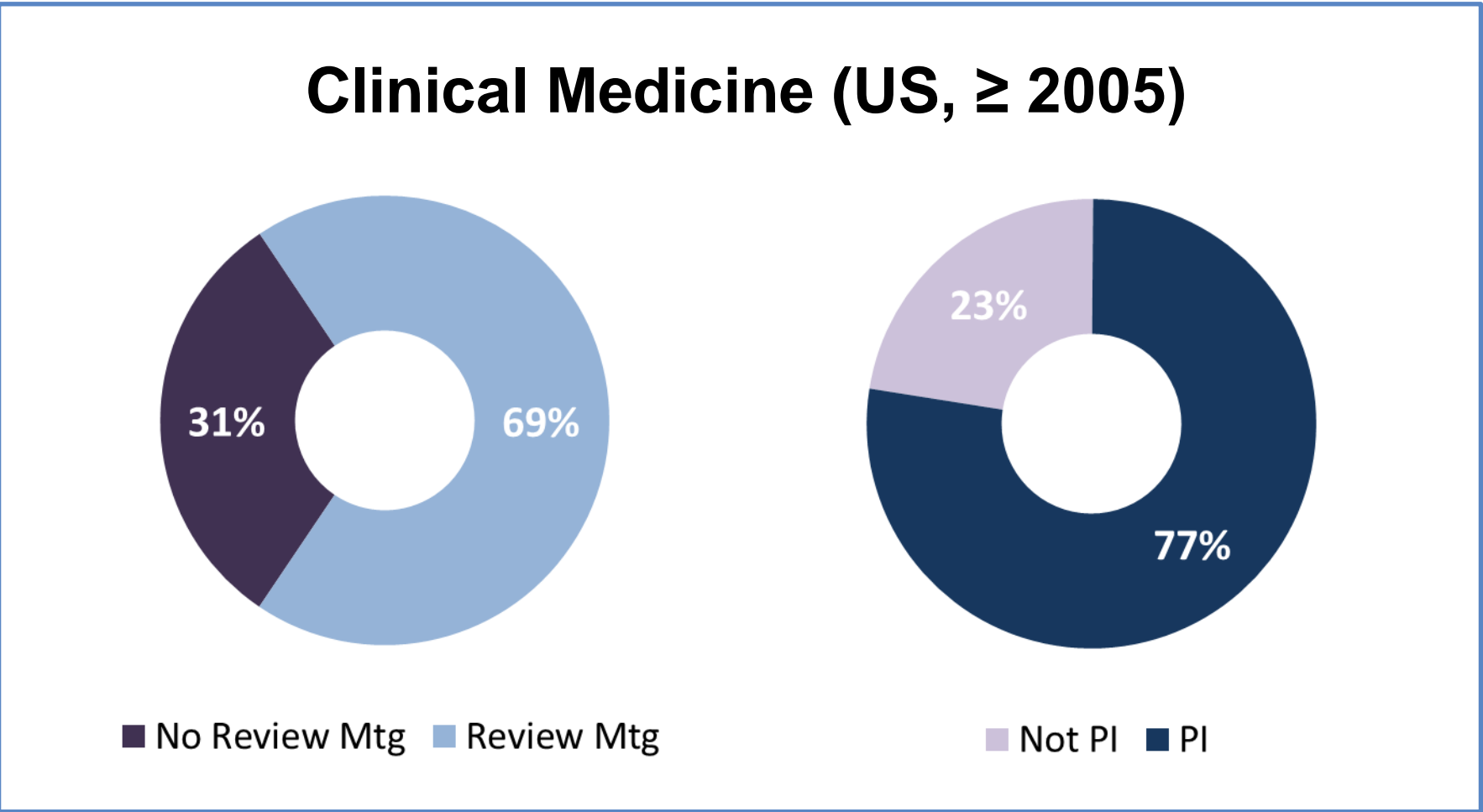
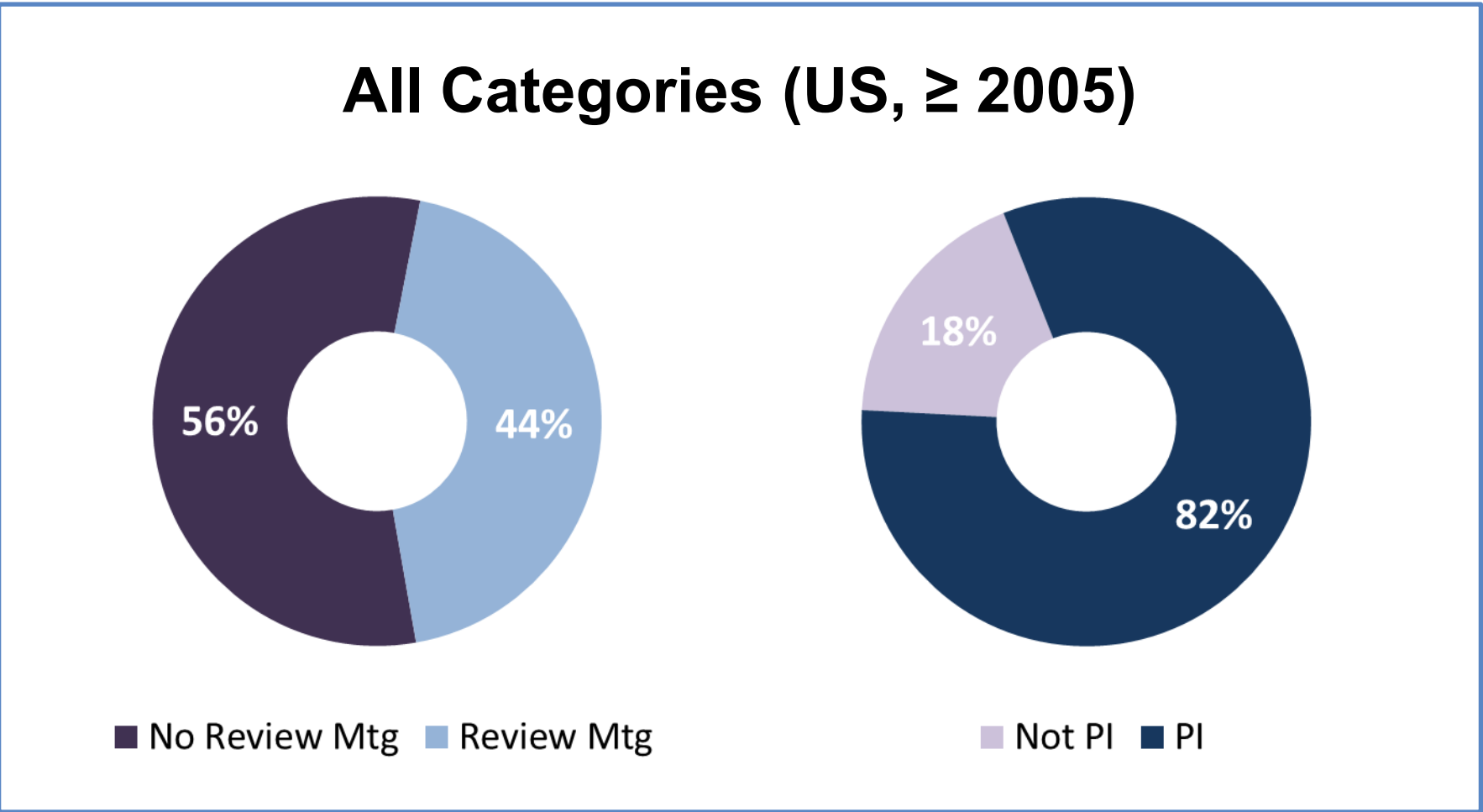
- We used the 2014 Thomson Reuters InCites™ database to identify 3,072 unique authors whose papers were in the top 0.1% of citations in the same field and published in the same year. We also used the InCites™ record to establish the field(s) and country of primary affiliation for each author.

- Of 3,072 unique authors (all authors, not limited to senior/corresponding authors):
 - 1,216 (40%) authors were known to the NIH.
 - 1,622 (53%) authors were primarily affiliated with US institutions.

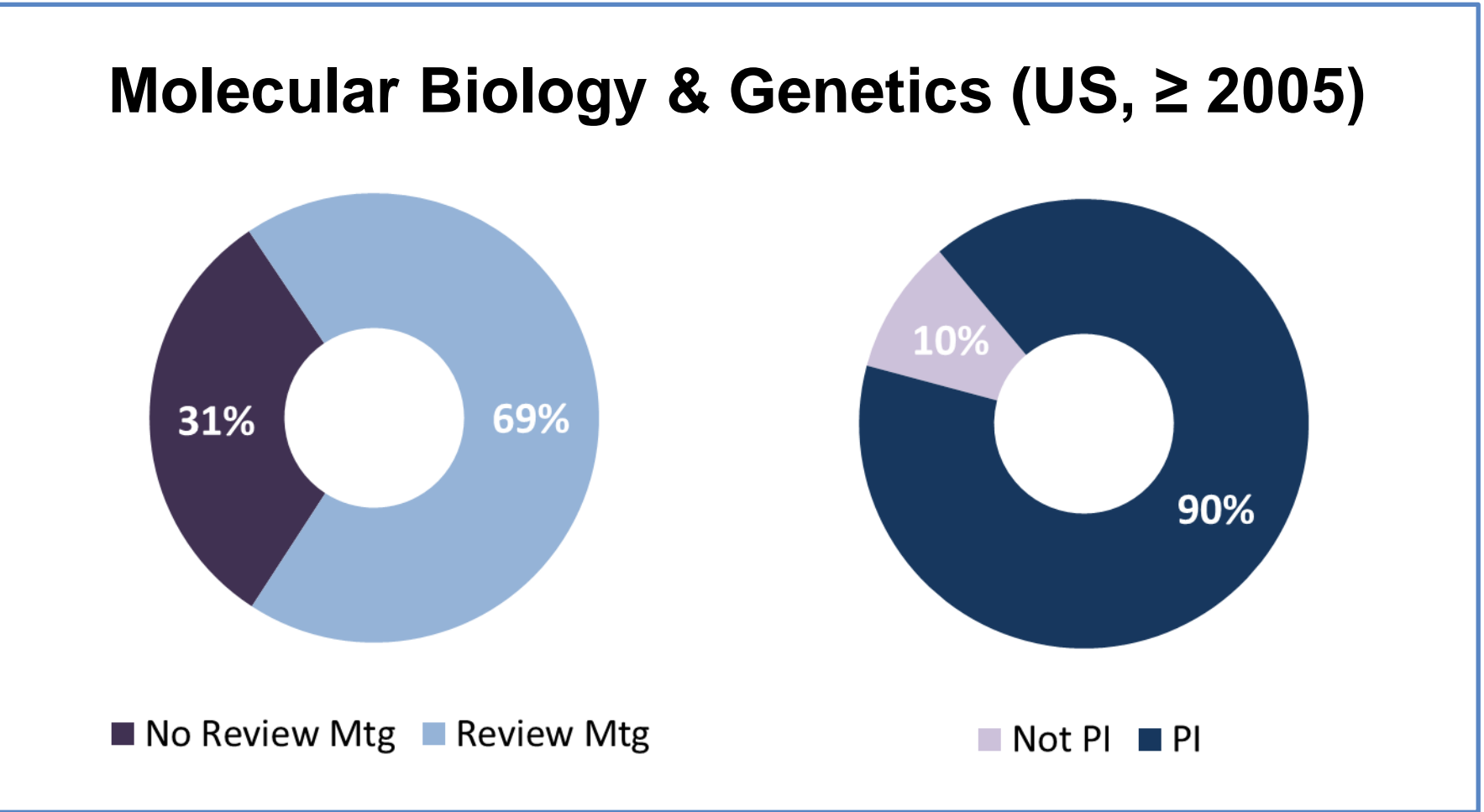
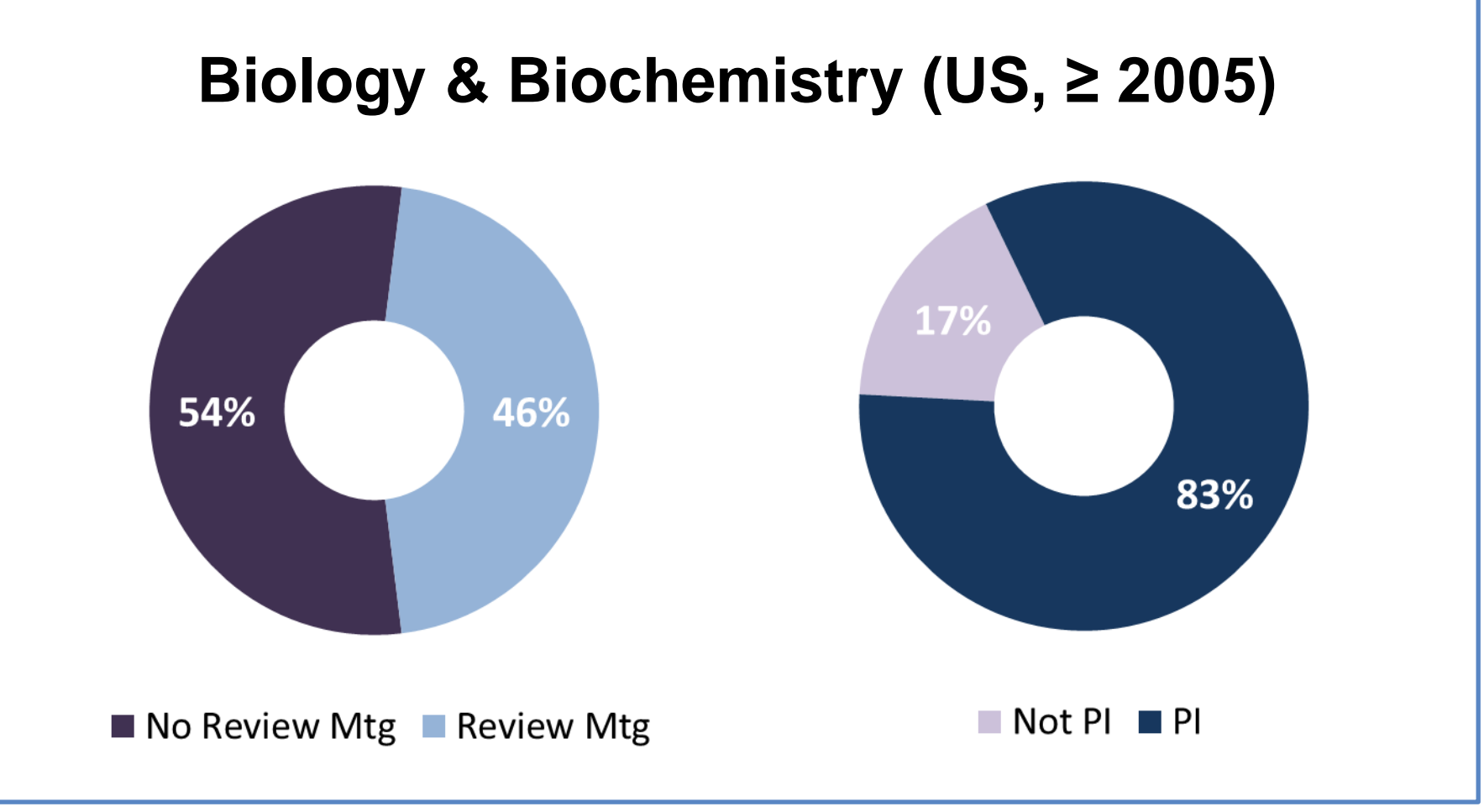


Results

- Of 1,622 US authors (all authors, not limited to senior/corresponding authors):
 - 740 (46%) had been PIs, *i.e.*, had received at least one NIH award since 1997 (generally a prerequisite for reviewers)



- 716 (44%) participated in at least one NIH study section meeting since 2005
- Of these, 586 (82%) received at least one NIH award since 2005



Limitations

- Citations provides an incomplete picture of scientific impact.
- InCites™ does not capture all publications, which might affect identification of highly-cited authors.
- Manual identification of PIs, disambiguation, and multiple IDs may introduce errors.

Conclusions

- A large proportion of America’s highly-cited authors have served on NIH study sections, but there may be room for a substantial minority who have not.